UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,090	07/31/2001	Kevin Collins	10006963-1	2456

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HEWLETT-PACKARD COMPANY	DODDS, HAROLD E
Intellectual Property Administration	

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2167	

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DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the

basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

2.   Claims 1-13, 16-19, 22, 23, and 26-29 are rejected under 35 U.S.C.

103(a) as being unpatentable over Reed et al. (U.S. Patent No. 5,862,325) and

Wilson et al. (U.S. Patent No. 6,070,159).

3.   Reed renders obvious independent claims 1 and 10 as follows:

"...identifying said data on said storage device..." at col. 34, lines 4-17 and col.

70, lines 26-31.

"...categorizing said identified data..." at col. 7, lines 7-9 and col. 34, lines 4-7.

"...based on a category thereof..." at col. 7, lines 7-9.

Reed does not teach the reallocation of data.

4.   However, Wilson teaches the reallocation of data as follows:

"...and reallocating at least a portion of said identified data..." at col. 9, lines 9-14,

col. 8, lines 56-61, and col. 5, lines 30-36.

It would have been obvious to one of ordinary skill at the time of the

invention to combine Wilson with Reed to provide for the reallocation of data in

order to minimize the amount of small blocks of storage that can not be used

efficiently and increase the amount of available storage space on storage units.

Reed and Wilson teach similar applications. They both teach the use of
computers, the use of databases, the use of networks, the use of files, the use of
records, the use of data, the use of groups, the use of identifiers, the use of
portions, and the use of users. Reed provides the identification and categorizing
of data, the use of storage devices, and providing alerts when thresholds are
reached and Wilson provides the reassignment of portions of identified data.

     5.   As per independent claim 28, the "...means for identifying data on
said storage device...," is taught by Reed at col. 34, lines 4-7 and col. 70, lines
26-31,

the "...means for categorizing said data...," is taught by Reed at col. 7, lines 7-9
and col. 34, lines 4-7,

the "...means for alerting a user...," is taught by Reed at col. 56, lines 35-37,

the "...when a threshold for said categorized data is satisfied...," is taught by
Reed at col. 89, lines 55-58 and col. 7, lines 7-9,

"...and means for reallocating at least a portion of said identified data...," is taught
by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36,

and the "...after said user is alerted...," is taught by Reed at col. 56, lines 35-37.

     6.   As per claim 2, the "...alerting a user when at least one
threshold...," is taught by Reed at col. 56, lines 35-37 and col. 89, lines 55-58
and the "...for a category of said data is satisfied...," is taught by Reed col. 7,
lines 7-9 and col. 31, lines 56-57.

     7.   As per claims 3 and 22, the "...defining a number of categories for
said data...," is taught by Reed at col. 17, lines 35-37 and col. 104, lines 20-24.

8.   As per claim 4, the "...reallocating at least a portion of said

identified data...," is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and

col. 5, lines 30-36

and the "...comprises moving said data...," is taught by Reed at col. 69, lines 28-

30.

9.   As per claim 5, the "...reallocating at least a portion of said

identified data...," is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and

col. 5, lines 30-36

and the "...comprises compressing said data...," is taught by Reed at col. 14,

lines 41-47.

10.   As per claims 6 and 26, the "...reallocating at least a portion of said

identified data...," is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and

col. 5, lines 30-36

and the "...comprises archiving said data...," is taught by Reed at col. 21, lines

52-60.

11.   As per claims 7 and 27, the "...reallocating at least a portion of said

identified data...," is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and

col. 5, lines 30-36

and the "...comprises moving said data to an Internet storage device...," is taught

by Reed at col. 69, lines 28-30 and col. 27, lines 36-45.

12.   As per claim 8, the "...identifying and categorizing said data...," is

taught by Reed at col. 34, lines 4-7 and col. 7, lines 7-9

and the "...is performed on a periodic basis...," is taught by Reed at col. 27, lines 45-47.

13.   As per claim 9, the "...identifying and categorizing said data...," is taught by Reed at col. 34, lines 4-7 and col. 7, lines 7-9

and the "...is based on at least one attribute of said data...," is taught by Reed at col. 29, lines 44-46.

14.   As per claim 11, the "...program code for identifying data on said storage device...," is taught by Reed at col. 34, lines 4-7 and col. 70, lines 26-31

and the "...comprises program code for generating and maintaining a list of data on said storage device...," is taught by Reed at col. 8, lines 64-65, col. 29, lines 52-53, and col. 70, lines 26-31.

15.   As per claim 12, the "...management interface...," is taught by Reed at col. 16, lines 15-21,

the "...and program code for displaying said categorized data to a user...," is taught by Reed at col. 26, lines 49-52 and col. 7, lines 7-9,

and the "...via said management interface...," is taught by Reed at col. 16, lines 15-21.

16.   As per claim 13, the "...said management interface...," is taught by Reed at col. 16, lines 15-21

and the "...comprises a graphic for displaying said categorized data...," is taught by Reed at col. 66, lines 19-26 and col. 7, lines 7-9.

17.   As per claim 16, the "...comprising program code for receiving commands from said user...," is taught by Reed at col. 52, lines 25-29,

the "...for reallocating said portion...," is taught by Wilson at col. 9, lines 9-14 and

col. 8, lines 56-61,

the "...of said categorized data...," is taught by Reed at col. 7, lines 7-9,

and the "...via said management interface...," is taught by Reed at col. 16, lines

15-21.

18.   As per claim 17, the "...said commands comprise selections of said

categorized data...," is taught by Reed at col. 52, lines 25-29, col. 7, lines 1-9,

and col. 71, lines 14-16

and the "...for managing said data...," is taught by Reed at col. 71, lines 14-16.

19.   As per claim 18, the "...said management interface is displayed for

said user...," is taught by Reed at col. 16, lines 15-21 and col. 26, lines 49-52

and the "...when a threshold for said data is satisfied...," is taught by reed at col.

89, lines 55-58 and col. 31, lines 56-57.

20.   As per claim 19, the "...an information database...," is taught by

Reed at col. 9, lines 20-21,

the "...and program code for accessing said information database...," is taught by

Reed at col. 67, lines 23-25 and col. 9, lines 20-21,

and the "...for identifying and categorizing said data...," is taught by Reed at col.

34, lines 4-7 and col. 7, lines 7-9.

21.   As per claim 23, the "...comprising program code for defining at

least one threshold...," is taught by Reed at col. 110, lines 38-42 and col. 89,

lines 55-58

and the "...wherein a user is alerted when said at least one threshold is

satisfied..." is taught by Reed at col. 56, lines 35-37, col. 89, lines 55-58, and col.

31, lines 56-57.

22.   As per claim 29, the "...means for selecting said data according to

said category thereof...," is taught by Reed at col. 68, lines 50-56 and col. 7, lines

7-9,

the "...wherein said means for reallocating only reallocates...," is taught by Wilson·

at col. 9, lines 9-14,

and the "...said data selected thereby...," is taught by Reed at col. 68, lines 50-

56.

23.   Claims 14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Reed and Wilson as applied to the claims above, and further

in view of Luong et al. (U.S. Patent No. 6,684,229).

As per claim 14, the "...said graphic for displaying said categorized

data...," is taught by Reed at col. 66, lines 19-26 and col. 7, lines 7-9,

but the "...is a pie chart...," is not taught by either Reed or Wilson.

However, Luong teaches the use of pie charts as follows:

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"...As shown therein, the capacity monitor window includes
a pie chart representation of the selected space and free
space available on the secondary storage device, e.g.,
Genesis hard drive..." at col. 19, lines 23-29.
```

It would have been obvious to one of ordinary skill at the time of the

invention to combine Luong with Reed and Wilson to use pie charts in order to

use a standard display procedure to represent the the total memory on a device

as either "used" or "free" and to gain greater acceptance of the system. Reed,

Wilson, and Luong teach the use of related systems. They teach the use of

computers, the use of databases, the use of networks, the use of files, the use of

records, the use of data, the use of identifiers, the use of portions, and the use of

users and Reed and Luong teach the use of formats. Reed provides the

identification and categorizing of data, the use of storage devices, and providing

alerts when thresholds are reached, Wilson provides the reassignment of

portions of identified data, and Luong provides pie charts and file allocation

tables, which are a class of file association tables.

24.   As per claim 20, the "...a file association table...," is taught by

Luong at col. 14, lines 39-43,

the "...and program code for accessing said file association table...," is taught by

Luong at col. 7, lines 20-23 and col. 14, lines 39-43,

and the "...for identifying and categorizing said data...," is taught by Reed at col.

34, lines 4-7 and col. 7, lines 7-9.

25.   As per claim 21, the "...said data is categorized...," is taught by

Reed at col. 7, lines 7-9,

the "...using said file association table...," is taught by Luong at col. 7, lines 20-

23,

the "...based on an identity of the application...," is taught by Reed at col. 78,

lines 13-19 and col. 70, lines 31-36,

and the "...that generated said data...," is taught by Reed at col. 69, lines 28-30.

26.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable

over reed and Wilson as applied to claims 12 above, and further in view of Siow

et al. (U.S. Patent No. 6,301,590).

As per claim 15, the "...said management interface displays information for

said categorized data...," is taught by Reed at col. 16, lines 15-21, col. 26, lines

49-52, and col. 7, lines 7-9,

but the "...in a drill-down format...," is not taught by either Reed of Wilson.

However, Siow teaches the use of drill-down formats as follows:

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"...FIG. 7B illustrates one of the manipulations that the
user may perform, namely a changing from a chart format to
a drill-down chart format..." at col. 9, lines 33-35.
```

It would have been obvious to one of ordinary skill at the time of the

invention to combine Siow with Reed and Wilson to have drill-down formats in

order to provide the user with the ability to click on a portion of a display and

obtain greater detailed on the identified object. This increases the flexibility of the

system. Reed, Wilson, and Siow teach the use of related applications. They

teach the use of computers, the use of databases, the use of networks, the use

of files, the use of data, the use of identifiers, and the use of users and Reed and

Siow teach the use of formats. Reed provides the identification and categorizing

of data, the use of storage devices, and providing alerts when thresholds are

reached, Wilson provides the reassignment of portions of identified data, and

Siow provides drill-down chart formats.

27.   Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Reed and Wilson as applied to claim 23 above, and further in

view of Gelb et al. (U.S. Patent No. 5,018,060).

As per claim 24, the "...said at least one threshold is a default...," is not

taught by either Reed or Wilson.

However, Gelb teaches the use of thresholds and defaults as follows:

```
"...Unless otherwise selected, the defaults for all of the
four storage groups are: auto-migration is enabled,
automatic backup is enabled, no automatic dump is
permitted, there are no migration thresholds set and a dump
class is left blank..." at col. 10, lines 47-51.
```

It would have been obvious to one of ordinary skill at the time of the

invention to combine Gelb with Reed and Wilson to use thresholds with set

default values in order to provide a warning to system users that a system

resource such as a system disk is nearing complete use of its data storage

capacity and to warn the users that unless a corrective action is taken that the

system will become inoperable. This is a common practice for computers and this

assists in the smooth running of a system. Reed, Wilson, and Gelb teach the use

of related applications. They teach the use of computers, the use of databases,

the use of files, the use of records, the use of data, the use of groups, the use of

identifiers, the use of portions, and the use of users and Reed and Gelb teach

the use of formats. Reed provides the identification and categorizing of data, the

use of storage devices, and providing alerts when thresholds are reached,

Wilson provides the reassignment of portions of identified data, and Gelb

provides default thresholds and the role of capacities of storage devices.

28.   As per claim 25, the "...said at least one threshold is based on

available capacity of said storage device...," is taught by Gelb at col. 10, lines 19-

24 and col. 4, lines 25-36.

Response to Arguments

29.   Applicant's arguments filed 5 August 2004 have been fully

considered but they are not persuasive. In the first argument for independent

claims 1, 10, and 28 on page 5, paragraphs 3-5 and page 6, paragraphs 1 and 2,

the Applicant states:

"The Action asserts that the '325 patent teaches identifying data on a storage
device, and cites column 20, lines 15-17 and column 70, lines 26-31 to support
the rejection. Applicant disagrees. The cited text reads as follows:

In addition to its composite type and composite value, each element 143 includes
standard attributes such as system ID. name, description, version value,
NewFlag, and HoldFlag. The system ID is a unique identification value in the
database. Identification number assignments throughout the database are
shown below.

File data includes data available directly via operating system calls such as files,
persistent system objects, or any other data stored directly in the users local or
network computer environment including removable storage devices
mechanisms such as floppy disk drives, CD-ROM drives, or tape drives.

Nothing in the cited text discloses or suggests identifying data on a storage
device, as recited in the claims. Applicants note that the system ID referenced in
the cited text uniquely identifies a network component (see column 24, lines 53-
65). The system ID does not identify data on a storage device."

The Examiner disagrees. Applicant's arguments fail to comply with 37

CFR 1.111(b) because they amount to a general allegation that the claims define

a patentable invention without specifically pointing out how the language of the

claims patentably distinguishes them from the references. A directory clearly

identifies files on a storage devise. Data on the storage devise is organized into

files. The language of the claims does not distinguish a method of identifying

data on a storage device from a directory.

　　　　30.　　In the second argument for independent claims 1, 10, and 28 on

page 6, paragraphs 3-6, the Applicant states:

'The Action further asserts that the '325 patent teaches categorizing said
identified data on a storage device, and cites column 7, lines 7-9 and column 20,
lines 15-17 to support the rejection. Applicant disagrees. The cited text reads as
follows:

Each subject database covers a number of related interest topics under which all
entries in the database are categorized.

In addition to its composite type and composite value, each element 143 includes
standard attributes such as system ID, name, description. version value,
NewFlag, and HoldFlag. The system ID is a unique identification value in the
database. Identification number assignments throughout the database are
shown below.

Nothing in the cited text discloses or suggests categorizing said identified data,
as recited in the claims."

The Examiner disagrees. Again Applicant's arguments fail to comply with 37

CFR 1.111(b) because they amount to a general allegation that the claims define

a patentable invention without specifically pointing out how the language of the

claims patentably distinguishes them from the references. There are many ways

of categorizing data. Reed's use of subject databases is clearly an effective

means of categorizing data.

　　　　31.　　In the third argument for independent claims 1, 10, and 28 on page

7, paragraph 4, the Applicant states:

"Nothing in the cited text discloses or suggests reallocating data in a storage
medium, much less reallocating identified data based on a category thereof, as
recited in the claims."

The Examiner disagrees. Wilson teaches the reallocation of data as follows:

```
"...To assist in accomplishing this desire, the apparatus 10
preferably includes reassigning means for reassigning data
groups from each of the plurality of biometric data groups
25 to the additional biometric searching engine for
performing a search of biometric data therefrom..." at col. 9,
lines 9-14.
```

When a group of data is reassigned it is allocated to a different set. This set may

be either a new set or another existing set. For this reason the reassigning of

data is also a reallocation of that data.

32.   In the fourth argument for independent claim 28 on page 7,

paragraph 5 and page 8, paragraphs 1 and 2, the Applicant states:

"Independent claim 28 further recites the limitation of "means for alerting a user
when a threshold for said categorized data is satisfied." The Action asserts that
the '325 patent teaches this limitation, and cites column 7, lines 7-9 and column
89, lines 55-58 to support the rejection. Applicant disagrees. The cited text reads
as follows:

Each subject database covers a number of related interest topics under which all
entries in the database are categorized.

When this integer value reached a threshold, the termination method executes a
notification method notifying the consumer, who may then take appropriate
action.

Nothing in the cited text discloses or suggests alerting a user when a threshold
for said categorized data is satisfied, as recited in the claims. To the contrary, the
integer value referenced in column 89, lines 55-58 is wholly unrelated to a
threshold for categorized data. as recited in claim 28.

The Examiner disagrees. The quoted text teaches the categorization of data and

the notification of the user (customer) when a threshold is reached. This teaches

the limitation "when a threshold for said categorized data is satisfied", which

appears in independent claim 28.

34.   In the fifth argument for claims 2-9, 11-27, and 29 on page 8,

paragraph 4, the Applicant states:

"The remaining claims depend ultimately from one of independent claims 1, 10,
or 28, and are allowable by virtue of their dependency. In addition, the remaining
claims recite specific structural limitations neither disclosed nor suggested by the
'325 patent, alone or in combination with the '159 patent. Accordingly, these
rejections should be withdrawn."

The Examiner disagrees. Since the responses to the first four arguments have

shown that independent claims 1, 10, and 28 are rendered obvious, claims 2-9

depend on independent claim 1, claims 11-27 depend on independent claim 10,

claim 29 depends on independent claim 28 and no additional arguments have

been provided for any of the dependent claims, for claims 2-9, 11-27, and 29 are

also rendered obvious.

Conclusion

35.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the

extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing
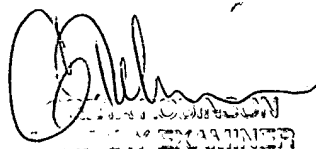
date of this final action.

36.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Harold E. Dodds, Jr.

whose telephone number is (571)-272-4110. The examiner can normally be

reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John E. Breene can be reached on (571)-272-4107. The

fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Harold E. Dodds, Jr.
Patent Examiner
December 27, 2004